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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,773	02/01/2002	Cui Bao Tai	32008-pa	3821

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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/061,773

Applicant(s)

TAI ET AL

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10, 12-32, 34, 35, 37-39 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35 is/are allowed.
- 6) ☒ Claim(s) 2-10, 12-32, 34, 37-39 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the amendment filed April 4, 2005 in which claims 6-8, 12, 13, 27, 29, 32, 34, 35, 39 and 41-43 were amended.

The rejection of claims 2-7 under 35 USC 112, first paragraph is withdrawn in view of Applicant's arguments.

It is suggested that the % recited in the claims be identified as % wt of the fuel or core or accelerant, etc.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 6-8, 12, 13, 27, 29, 32, 34, 39 and 41-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not support the language "said accelerant present as a gradient of material penetrating into said..." At page 17, lines 9-17, Applicant discloses "[T]he viscosity of the accelerant mixture will determine the extent to which the accelerant penetrates the monolith 2 and the extent to which accelerant is coated within

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the venting holes 12-16 of the finished product.” If it was Applicant’s intent to incorporate this limitation into the claims, it is suggested that Applicant amend the claims to read – said accelerant penetrating into said (core, monolith, facet, etc) from said (core, monolith, facet, etc) of said (core, monolith, facet, etc) depending on viscosity of accelerant --.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over CN 1196382 in view of Glazkova.

CN teaches a briquette comprising a matrix layer and an igniting layer. The matrix layer comprises anthracite, charcoal, starch and water. The igniting layer comprises anthracite, barium nitrate and sodium nitrate. See abstract in its entirety. CN teaches the limitations of the claims other than the accelerant is a combination of sodium, calcium and potassium nitrates. However, Glazkova teaches this difference.

Glazkova teaches that Na, K, Ba, NH₄ and Ca nitrates are used as oxidant in coal composition. See abstract in its entirety.

It would have been obvious to one of ordinary skill in the art to have used a combination of oxidants because it is prima facie obvious to combine two or more

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components each of which is taught by the prior art to be useful for the same purpose in order to form a composition to be used for the same purpose. *In re Kerkhoven*, 205 USPQ 1069.

5. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christian (US 4,243,393).

Christian teaches a coal article having a tube-like structure with a hollow core (see abstract; Figures). The coal article may be dipped in hot wax to coat the article. The wax facilitates the ignition and burning of the coal (see col. 4, lines 22-31). It is the examiner's position that the wax functions as an accelerant. The core of the article may be of different shapes, as shown in the drawings.

Christian does not specifically teach that the accelerant is on the venting means. However, it would be reasonable to expect that the accelerant would be on the venting means because Christian dips the coal article into the wax (accelerant) and coats the article with the wax. Given this teaching it would be reasonable to expect that some of the wax adheres to the inside article in the hollow core.

6. Claims 2, 4, 5, 8, 10, 12, 32, 34, 39 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,306,502.

GB teaches a briquette for barbecuing comprising carbonaceous matter and having disposed on top of the carbonaceous material an oxidizing material (accelerant). GB teaches the briquettes contain anthracite (see abstract, claims 1, 4, 5, 6; and Examples).

The carbonaceous material is coal, coke or charcoal. The materials are bound together by use of a water-based binder such as starch. The carbonaceous material and binder are consolidated in a mold by pressure (see page 1, lines 3-7, 14-19, 22-27; page 2, lines 1-2). The briquettes also contain oxidizing material disposed on top of the carbonaceous material. The oxidizing material comprises from 5-75% of the igniting section of the briquette (see page 2, lines 5-22; page 3, lines 2-4). The oxidizers include inorganic nitrates, such as alkali and alkaline earth metals nitrates (see page 4, lines 20-21 and Examples). The briquette may possess one or more flues (see Figures).

GB teaches the limitations of the claims other than the combination of nitrates. However, GB teaches that one or more nitrates may be used in the composition (claim 22) and he exemplifies sodium, potassium and calcium nitrates (see Examples 2, 3 and 6). Therefore, it would have been obvious to one of ordinary skill in the art to have used a combination of oxidants because GB teaches that one or more may be used in the briquette.

GB also fails to teach the separate step of forming the monolith of carbonaceous material and then introducing the accelerant and pressing the carbonaceous material and accelerant. However, it is well settled that the selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,306,502 in view of Young (US 4,822,380).

GB has been discussed above. GB fails to teach that the briquette of its invention is coated. However, Young teaches this limitation. See abstract in its entirety.

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Young teaches that the latex is viscous which suggests that it is thick enough to peel off of the briquette (column 4, lines 45-67). It would have been obvious to one of ordinary skill in the art to have prepared a cover that is removable because GB teaches that briquettes may be formed as double briquettes that may be broken along a line defining a groove (see page 7, lines 21-24). The protected cover would be removed to allow the consumer to use as few or as many briquettes as desired.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,306,502 in view of Young (US 4,822,380) and Avedikian (US 3,934,986).

GB and Young have been discussed above. GB fails to teach that the briquette contains a fusing mean. However, Avedikian teaches this difference (see column 4, lines 54-64).

It would have been obvious to one of ordinary skill in the art to have included a fusing means on the briquettes because it would allow easier ignition of the briquette.

9. Claims 3, 9, 13-26 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,306,502 in view of Avedikian (US 3,934,986).

GB fails to teach that the briquette contains a fusing mean. However, Avedikian teaches this limitation (see column 4, lines 54-64).

It would have been obvious to one of ordinary skill in the art to have included a fusing mean on the briquettes because it would allow for easier ignition of the briquette.

Response to Arguments

10. Applicant's arguments filed have been fully considered but they are not persuasive.

11. Applicant argues that CN does not teach that the accelerant is present as a gradient in the monolith.

CN teaches that the igniting layer comprises anthracite coal, barium nitrate, sodium nitrate, starch and water. It is clear from this reference that the igniting layer does penetrate the matrix layer because it is an aqueous solution that would penetrate the pores of the matrix material in a gradient manner.

12. Applicant argues that Christian fails to teach or suggest an accelerant. Applicant argues that the wax of Christian does not accelerate heating.

Dr. Torero's declaration is not sufficient to overcome the reference. Random House Unabridged Dictionary defines accelerant as a substance that accelerates the spread of fire or makes a fire more intense. The wax of Christian clearly does this since Christian teaches that the wax functions of an igniter, is easily burnable and ensures that sufficient heat is produced (see col. 6, lines 10-20). Christian also teaches that the article is dipped in hot wax to impregnate the article (see col. 4, lines 66-68). In the absence of the wax, it is clear that the article of Christian would not easily ignite or burn nor produce sufficient heat.

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13. Applicant argues that GB does not teach the second pressing step and that the present invention does not comprise two distinct layers.

It is clear from reading GB and reviewing the drawings, and not by using Applicant's disclosure, that in order to prepare the briquettes two separate pressing steps must occur, otherwise there would no layers. With respect to the gradient element of the present invention, since GB prepares the ignition layer with water, it would be more than reasonable to expect that some of the ignition layer would penetrate the core and therefore be present as a gradient material.

14. Claim 35 is allowable because the prior art fails to teach or suggest an accelerant composition comprising 60-70 % wood charcoal, 25-32% barium nitrate, 1-5% sodium nitrate, 5-10% anthracite coal and a binder.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

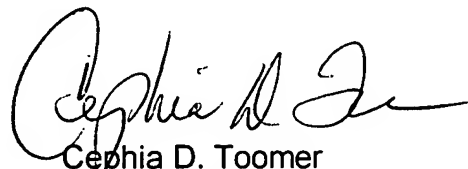
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cephia D. Toomer
Primary Examiner
Art Unit 1714

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